

Audubon's Ornithological Biography.—Reading in the April, 1904, number of 'The Auk' the note by Mr. Reginald Heber Howe, Jr. on a certain imprint of this work reminds me that I have a copy with similar imprint in my ornithological library. My copy has untrimmed margins, is yellow with age and bound in cardboard covered with a thin, unmarked, uncolored cloth. This copy contains 528 pages, 506 being of text, followed by an Index, Prospectus, Contents of Vol. I of the Birds of America, Extracts from Reviews, and List of Subscribers. My copy was received in 1894 from Wm. D. Doan of Coatsville, Pa.—W. E. SNYDER, *Beaver Dam, Wisc.*

RECENT LITERATURE.

Cooke's Distribution and Migration of North American Warblers.¹—It is with great pleasure that we welcome Professor Cooke's important contribution to our knowledge of the seasonal distribution and migration of this, one of the largest and the most distinctly peculiar of North American birds, the Warblers, or the Mniotiltidæ. It is a subject which has long occupied the author's attention, and for the investigation of which he has had access to an accumulation of data gathered during many years of well directed effort on the part of the Chief of the Biological Survey, Dr. C. Hart Merriam—an amount of information unequalled outside of North America for the investigation of the distribution and migration of the birds of any area or of any group. The degree of migration exhibited by different members of the family varies, as is well known, from nearly sedentary species to those which breed as far north as the limit of arboreal vegetation and spend the winter far down in the tropics. Some, also, are exceedingly local in their dispersal, while others range over a large part of two continents.

Professor Cooke treats first and rather briefly (pp. 8-14) of migration routes, on the same lines as in his paper in the present number of 'The Auk' (pp. 1-15) entitled 'Routes of Bird Migration,' and also in his 'Some New Facts about Bird Migration' (see Auk, XXI, p. 501), but of course with more direct reference to his present subject. The species are first (pp. 14-16) briefly reviewed with reference to the "southernmost extension of their winter ranges," those of eastern North America being

¹ Distribution and Migration of North American Warblers. By Wells W. Cooke, Assistant, Biological Survey, U. S. Department of Agriculture, Division of Biological Survey—Bulletin No. 18, C. Hart Merriam, Chief. Washington: Government Printing Office, 1904. 8vo, pp. 142.

arranged under four categories: (1) 'Species that range to the mainland of South America'—about 20; (2) 'Species known to range to but not beyond Panama,'—7 species; (3) 'Species entering Mexico and Central America but not known to reach Panama'—9 species; (4) 'Species that do not regularly winter on the mainland south of the United States, but remain in the Southern States or the West Indies'—11 species.

The species formally treated in the 'Systematic' part (pp. 16-139) include only those found north of Mexico and in Lower California, and are taken up in the sequence of the A. O. U. Check-List; they number "59 species and 19 subspecies." "In each case," says the author, "the breeding range is given first, then the winter range, followed by a synopsis of the time of spring migration and of fall migration. . . . Most interest attaches to the movements of the warblers of the eastern part of the United States that pass by flight over water to their winter homes. These, therefore, receive full treatment, while less is said of the migration of the western species that make the journey from the United States to Mexico and southward entirely by land. Special attention has been paid to the definition of the southern limit of the breeding range of each species—a subject that for many years has received the careful consideration of the Biological Survey. So far as known to the writer," continues the author, "the present paper is the first attempt to define exactly the northern limit of the winter range of each species, and also to indicate the altitudinal range of the same in its winter home."

The above extract fully sets forth the scope and aims of the work, which appear to have been carried out with all possible care and completeness; and we have thus a contribution to ornithological literature as unique as it is important. Based largely on records received from voluntary observers by the Biological Survey, from land stations and lighthouses covering a wide area and a period of twenty years or more, other unpublished records from Mexico, Nicaragua, and especially Costa Rica, have also been available, and the literature of ornithology has been systematically examined, and thousands of scattered records have been collated and utilized. While there are still gaps to be filled, as along the Gulf coast of the United States, and in Middle America between Mexico and Costa Rica, we have at least the main facts conveniently accessible, for which we should be deeply grateful.—J. A. A.

Osgood on Birds of Alaska. — In his account of 'A Biological Reconnaissance of the Base of the Alaska Peninsula,'¹ made during the summer and fall of 1902, Mr. Osgood gives a general account of the country traversed, with lists of the mammals and birds (pp. 51-81) collected or observed by him, or hitherto recorded or collected by others. He landed

¹ North American Fauna, No. 24, November 23, 1904, pp. 1-86, with 2 maps and 5 half-tone plates.